Critical Issues in Medicine

Impact of the Brain Death Ruling in Washington State

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In a 1980 Washington State Supreme Court decision, brain death was recognized as a means of determining death, but the court declined to specify a procedural mechanism to be followed. According to a survey of hospitals in Washington, the decision has had little impact in the state, apparently due to the medical profession's unfamiliarity with it. As a result of the survey, we have identified problems of procedure and interaction with the legal system. A consensus of those contacted was that no formal, hospital-mandated definition of brain death is needed.

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ate in 1980 the Supreme Court of the state of Wash-Lington issued a ruling that recognized brain death as a legal means of determining death in the state. This ruling states that, in addition to traditional criteria, death is defined as "irreversible cessation of all functions of the entire brain, including the brain stem."1 Of particular note was the court ruling that left the medical profession to determine what findings were diagnostic of brain death. The court said, "We do not address what are acceptable diagnostic tests and medical procedures for determining when brain death has occurred. It is left to the medical profession to define the acceptable practices." While the court's decision could dramatically alter practice in some hospitals, the impact throughout the state of Washington is unclear. To evaluate if brain death has been used to define death in Washington state, and to learn whether or not hospitals have developed formal definitions of death, the following telephone survey was undertaken.

Materials and Methods

One of us (D.C.T.) conducted a telephone survey of the 117 member hospitals of the Washington State Hospital Association. A knowledgeable person—in most cases the medical director of the intensive care unit, the chairperson of the critical care committee, the head nurse or intensive care supervisor—was interviewed, and in a few instances a member of the hospital administration was interviewed. If a respondent

was unfamiliar with current practice another person was contacted. No person was interviewed if he or she admitted to being unfamiliar with current practice in the hospital.

The following six questions were developed after we evaluated the responses from the first five hospitals:

- 1. Do your physicians distinguish brain death cases from cases in which life support is discontinued because of a hopeless prognosis per se?
- 2. Have any formal criteria been developed by the hospital to be used to determine brain death?
- 3. Are similar criteria followed in cases that involve potential legal problems (such as child abuse, attempted homicide or organ transplants)?
- 4. Is the decision that brain death has occurred reviewed by a review committee, by the medical director or in any other fashion?
- 5. Has this topic caused significant problems at your hospital? If so, what sorts of problems?
- 6. Are you aware that the Washington State Supreme Court has issued an opinion as to the declaration of brain death? If so, are you aware of the details?

The questions were asked in an open-ended fashion with clarification solicited when necessary.

Results

Cooperation among the respondents was excellent. Interest appeared to be high. Of the 117 hospitals, 43

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had no intensive care unit; they were excluded from the survey. The other 74 hospitals each provided information.

In 55 cases the chair of the critical care committee or the medical director was interviewed, in 15 instances the head nurse or supervisor was interviewed and in four instances, an administrator. The responses to the six questions are tabulated below.

- 1. In 57 hospitals (77%) it is common practice to differentiate cases of brain death from those in which the patient is hopelessly comatose but still technically alive. In 17 hospitals (23%) no apparent distinction is made.
- 2. In all, 67 hospitals (91%) have not adopted formal criteria for determination of brain death; 7 hospitals (9%) have formal criteria that are adopted as hospital policy. Generally, these criteria follow the Harvard Criteria,² the National Institutes of Health Criteria³ or the British Criteria.⁴
- 3. Of the 74 hospitals, 22 (30%) had not had cases involving "extraordinary" legal situations and, therefore, had not confronted the issue of what to do in such situations. Seventeen other respondents reported that for such legal cases, they would determine brain death according to the usual definitions and discontinue support in accordance with their usual practices. In contrast, 30 hospitals (40%) reported that when an extraordinary case arose, a different approach to documentation of brain death had been or would be followed. Specifically, in one hospital the chief of staff would be personally involved, in two hospitals the county's medical examiner or coroner would be involved and, in the rest of the hospitals, additional consultation about, or extra documentation of, the determination of brain death would be obtained.
- 4. In 63 hospitals (85%) no review is required of a brain death determination. In these hospitals, apparently a single physician can make that determination and discontinue support systems. In 26 of those hospitals, however, a consultation is usual and customary in such a situation. In contrast, for 11 hospitals (15%) there is a formal review mechanism, with four requiring a neurologic consultation, one involving the executive committee of the hospital, two involving the medical director of the intensive care unit and four involving a second physician's participation.
- 5. In all, 56 hospitals (76%) reported no problems involving brain death determinations or discontinuation of life support in their institutions, whereas 18 (24%) reported that problems had occurred. Five of these hospitals had been involved in litigation concerning discontinuation of life support. Admittedly, four of those cases were not situations in which brain death was at issue; rather, the issue was one of discontinuing life support in patients who did not meet predetermined brain death criteria. The fifth case was the one from which the state's supreme court brain death decision arose. During our survey a major problem perceived

among respondents emerged—that is, there is a general perception among nursing staff that physicians are not aggressive enough in discontinuing life support, that they do not confront the issue and that they tend to maintain patients on life support exceptionally long. Moreover, in two hospitals nurses have asked for reviews of decisions with which they did not agree. In two other hospitals questions arose of how to proceed once a brain death has been determined—that is, how to deal with family and staff and when and in what manner life support should be discontinued.

6. Of the 74 respondents, 42 (57%) reported that they were familiar with the decision of the Washington State Supreme Court, whereas 32 (43%) were not familiar with that decision. Of those familiar with the decision, 29 claimed to be familiar with the details. Thus, 45 respondents were either unacquainted with the decision or not conversant with the details of the decision.

Discussion

Clearly the decision of the Washington State Supreme Court has not had widespread impact some three years after it was rendered. Part of the reason appears to be ignorance of the decision, occurring in over half the hospitals surveyed. Although the mass media and professional newsletters carried information about the decision, no formal communication had been directed toward physicians in the state of Washington concerning a major change in the legal definition of death. It is therefore not surprising that a large proportion of physicians are unfamiliar with that decision.

Following the Washington State Supreme Court decision, some observers questioned whether formal brain death criteria ought to be adopted. Interestingly, two years later, few of the intensive care units in the state had adopted a formal mechanism to determine brain death; most were leaving the matter of definition to the individual physicians involved. Because many hospitals do not have electroencephalographic equipment or other advanced forms of technology available, this approach may be appropriate. Obviously different means may have to be used to determine brain death in different locations. With advancing technology, newer techniques may become available and, if formal criteria were to be adopted, these criteria would have to be updated to keep pace with advancing technology. Such an approach to defining brain death is consistent with the position recently published in the Journal of the American Medical Association.5

That 30 hospitals used or would use a different approach to the definition of brain death and documentation thereof in cases that involve extraordinary legal problems probably reflects two concerns. One is the unfamiliarity with the brain death decision and, therefore, hesitancy to use brain death as a legal means of determining death in appropriate patients. The other reflects an understandable paranoia of physicians about medicolegal matters and their feeling that extra docu-

mentation or a preponderance of medical opinion needs to be obtained for any case likely to involve the courts.

A large proportion of hospitals denied having a required review of brain death decision. Because there is no review when death is determined by cessation of heart beat and respiratory function, this lack of a review process may simply reflect the usual approach to the determination of death or it may indicate that no local controversy has arisen.

A large majority of respondents reported no problems with brain death decisions, but several legal issues have arisen in this state with regard to discontinuing life support in a patient who does not meet brain death criteria. Clearly, the issue of discontinuing life support in a patient who does not meet the criteria calls for clarification, and the recent Colyer⁶ decision of the Washington State Supreme Court appears to address some of these issues, though other cases are still pending in the courts.

Several hospitals have questioned how to proceed once brain death is determined. The general approach in this state appears to be to pronounce a patient dead at the time of the determination of brain death and then to discuss the options with the family. At this point, most families express a desire to see the patient one last time; generally they are permitted to do so, during which time life support is continued. Following the visit life support is discontinued. The time of death is recorded as the time when brain death had been determined, as opposed to the time of cessation of heart beat.

In summary, our data indicate that the brain death decision of the Washington State Supreme Court has had surprisingly little impact throughout the state, largely because of apparent physician ignorance of this means of determining death. Clearly, there needs to be a more effective process of informing physicians of major changes in such legal aspects of medicine. A consensus of the physicians surveyed was that no formal mechanism needs to be set up to determine brain death in their hospitals and that no formal review of the process should be required. At the same time there is a continuing need to clarify some of the legal issues involved in discontinuing life support in patients who do not meet brain death criteria, but who apparently have no possible hope of recovering.

REFERENCES

- 1. Re Bowman, 94 W2d 407 (Wash 1980)
- 2. A definition of irreversible coma: Report of the ad hoc committee the Harvard Medical School to examine the definition of death. JAMA of the Harvard M 1968; 205:337-340
- 3. An appraisal of the criteria of cerebral death—A summary statement: A collaborative study. JAMA 1976; 237:982-986

 4. Conference of Royal Colleges and Faculties of the United Kingdom: Diagnosis of brain death. Lancet 1976; 2:1069-1070
- 5. Guidelines for the determination of death—Report of the Medical Consultants on the Diagnosis of Death to the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research. JAMA 1981 Nov 13; 246:2184-2186
 - 6. Re Colyer, 99 W2d 114 (Wash 1983)